

WHAT IS CLAIMED IS:

- 1                   1.       A method for determining whether a subject has or is predisposed for a  
2    mental disorder, the method comprising the steps of:
  - 3                   (i) obtaining a biological sample from a subject;
  - 4                   (ii) contacting the sample with a reagent that selectively associates with a  
5    polynucleotide or polypeptide encoded by a nucleic acid that hybridizes under stringent  
6    conditions to a nucleotide sequence of SEQ ID NO:1 or 3; and
  - 7                   (iii) detecting the level of reagent that selectively associates with the sample,  
8    thereby determining whether the subject has or is predisposed for a mental disorder.
- 1                   2.       The method of claim 1, wherein the reagent is an antibody.
- 1                   3.       The method of claim 1, wherein the reagent is a nucleic acid.
- 1                   4.       The method of claim 1, wherein the reagent associates with a  
2    polynucleotide.
- 1                   5.       The method of claim 1, wherein the reagent associates with a  
2    polypeptide.
- 1                   6.       The method of claim 1, wherein the level of reagent that associates  
2    with the sample is different from a level associated with humans without a mental disorder.
- 1                   7.       The method of claim 1, wherein the biological sample is obtained from  
2    amniotic fluid.
- 1                   8.       The method of claim 1, wherein the mental disorder is a mood disorder  
2    or psychosis.
- 1                   9.       The method of claim 7, wherein the mood disorder is selected from the  
2    group consisting of bipolar disorder and major depression.
- 1                   10.      The method of claim 8, wherein the psychosis is schizophrenia.
- 1                   11.      The method of claim 1, wherein the polynucleotide comprises a  
2    nucleotide sequence of SEQ ID NO:1 or 3.

- 1                    12.    The method of claim 1, wherein the polypeptide comprises an amino  
2 acid sequence of SEQ ID NO:2 or 4.
- 1                    13.    A method of identifying a compound for treatment of a mental  
2 disorder, the method comprising the steps of:  
3                    (i) contacting the compound with a polypeptide, the polypeptide encoded by a  
4 polynucleotide that hybridizes under stringent conditions to a nucleic acid sequence  
5 comprising a nucleotide sequence of SEQ ID NO:1 or 3; and  
6                    (ii) determining the functional effect of the compound upon the polypeptide,  
7 thereby identifying a compound for treatment of a mental disorder.
- 1                    14.    The method of claim 13, wherein the contacting step is performed *in*  
2 *vitro*.
- 1                    15.    The method of claim 13, wherein the polypeptide is expressed in a cell  
2 and the cell is contacted with the compound.
- 1                    16.    The method of claim 13, wherein the mental disorder is a mood  
2 disorder or psychosis.
- 1                    17.    The method of claim 16, wherein the mood disorder is selected from  
2 the group consisting of bipolar disorder and major depression.
- 1                    18.    The method of claim 16, wherein the psychosis is schizophrenia.
- 1                    19.    The method of claim 18, further comprising administering the  
2 compound to an animal and determining the effect on the animal.
- 1                    20.    The method of claim 19, wherein the determining step comprises  
2 testing the animal's mental function.
- 1                    21.    The method of claim 13, wherein the polynucleotide comprising a  
2 nucleotide sequence of SEQ ID NO:1 or 3.
- 1                    22.    The method of claim 13, wherein the polypeptide comprises an amino  
2 acid sequence of SEQ ID NO:2 or 4.

- 1                    23.     A method of identifying a compound for treatment of a mental disorder  
2     in a subject, the method comprising the steps of:  
3                    (i) contacting the compound to a cell, the cell comprising a polynucleotide that  
4     hybridizes under stringent conditions to a nucleotide sequence of SEQ ID NO:1 or 3; and  
5                    (ii) selecting a compound that modulates expression of the polynucleotide,  
6     thereby identifying a compound for treatment of a mental disorder.
- 1                    24.     The method of claim 23, wherein the expression of the polynucleotide  
2     is enhanced.
- 1                    25.     The method of claim 23, wherein the expression of the polynucleotide  
2     is decreased.
- 1                    26.     The method of claim 23, further comprising administering the  
2     compound to an animal and determining the effect on the animal.
- 1                    27.     The method of claim 26, wherein the determining step comprises  
2     testing the animal's mental function.
- 1                    28.     The method of claim 23, wherein the mental disorder is a mood  
2     disorder or psychosis.
- 1                    29.     The method of claim 28, wherein the mood disorder is selected from  
2     the group consisting of bipolar disorder and major depression.
- 1                    30.     The method of claim 28, wherein the psychosis is schizophrenia.
- 1                    31.     The method of claim 23, wherein the polynucleotide comprises a  
2     nucleotide sequence of SEQ ID NO:1 or 3.
- 1                    32.     A method of treating a mental disorder in a subject, the method  
2     comprising the step of administering to the subject a therapeutically effective amount of a  
3     compound identified using the method of claim 13 or claim 23.
- 1                    33.     The method of claim 32, wherein the mental disorder is a mood  
2     disorder or psychosis.

- 1                    34.     The method of claim 33, wherein the mood disorder is selected from  
2     the group consisting of bipolar disorder and major depression.
- 1                    35.     The method of claim 33, wherein the psychosis is schizophrenia.
- 1                    36.     The method of claim 32, wherein the compound is a nucleic acid.
- 1                    37.     The method of claim 36, wherein the nucleic acid hybridizes under  
2     stringent conditions to a nucleic acid comprising a nucleotide sequence of SEQ ID NO:1 or 3.
- 1                    38.     The method of claim 32, wherein the compound is identified using the  
2     method of claim 14 and the polynucleotide comprises a nucleotide sequence of SEQ ID NO:1  
3     or 3.
- 1                    39.     The method of claim 32, wherein the compound is identified using the  
2     method of claim 14 and the polypeptide comprises an amino acid sequence of SEQ ID NO:2  
3     or 4.
- 1                    40.     The method of claim 32, wherein the compound is identified using the  
2     method of claim 24 and the polynucleotide comprises a nucleotide sequence of SEQ ID NO:  
3     1 or 3.
- 1                    41.     A method of treating mental illness in a subject, the method  
2     comprising the step of administering to the subject a therapeutically effective amount of a  
3     polypeptide, the polypeptide encoded by a polynucleotide that hybridizes under stringent  
4     conditions to a nucleotide sequence of SEQ ID NO:1 or 3.
- 1                    42.     The method of claim 41, wherein the polynucleotide comprises a  
2     nucleotide sequence of SEQ ID NO:1 or 3.
- 1                    43.     The method of claim 41, wherein the mental illness is a mood disorder  
2     or psychosis.
- 1                    44.     The method of claim 43, wherein the mood disorder is selected from  
2     the group consisting of bipolar disorder and major depression.
- 1                    45.     The method of claim 43, wherein the psychosis is schizophrenia.

1                   46.     A method of treating mental illness in a subject, the method  
2 comprising the step of administering to the subject a therapeutically effective amount of a  
3 nucleic acid, wherein the nucleic acid hybridizes under stringent conditions to a nucleotide  
4 sequence of SEQ ID NO:1 or 3.

1                   47.     The method of claim 46, wherein the mental illness is a mood disorder  
2 or psychosis.

1                   48.     The method of claim 47, wherein the mood disorder is selected from  
2 the group consisting of bipolar disorder and major depression.

1                   49.     The method of claim 47, wherein the psychosis is schizophrenia.

1                   50.     The method of claim 46, wherein the nucleic acid comprises a  
2 complementary sequence to the nucleotide sequence of SEQ ID NO:1 or 3.